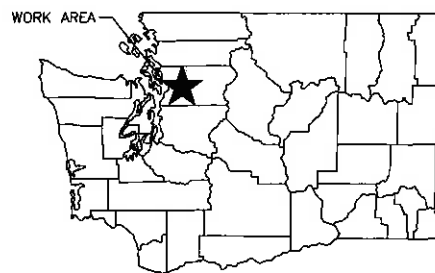
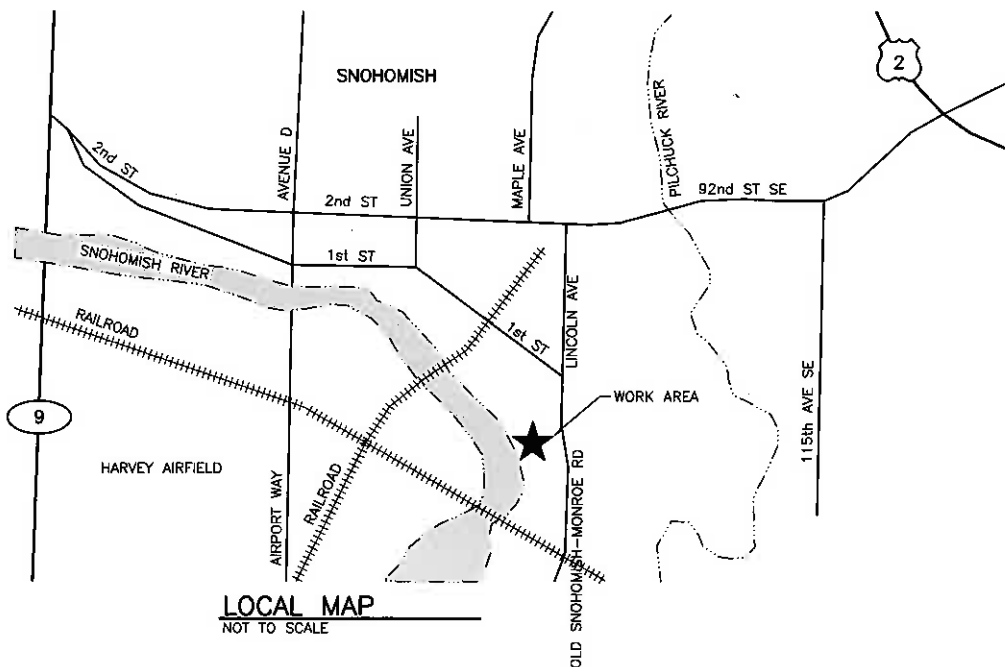


VICINITY MAP
NOT TO SCALE



STATE MAP
NOT TO SCALE



LOCAL MAP
NOT TO SCALE

ENG. PROJECT NO. **SH:M:15-2**

PORTION OF: **T28N R6E SEC18**

REFERENCE NUMBER:

APPLICANT:

WASHINGTON DEPT. of FISH & WILDLIFE
600 CAPITOL WAY N.
OLYMPIA, WA 98501-1091

PROJECT LOCATION (ADDRESS):

CITY OF SNOHOMISH
20 LINCOLN AVE
SNOHOMISH, WA

PROPOSED PROJECT:

BUILD BOAT ACCESS RAMP
AND PARKING AREA

ADJACENT PROPERTY OWNER:

1. STOCKER

LAT/LONG: 47° 54' 26"/122° 05' 20"

DATUM: NAVD 88

SHEET 1 OF 15

DATE: 02/17/2015

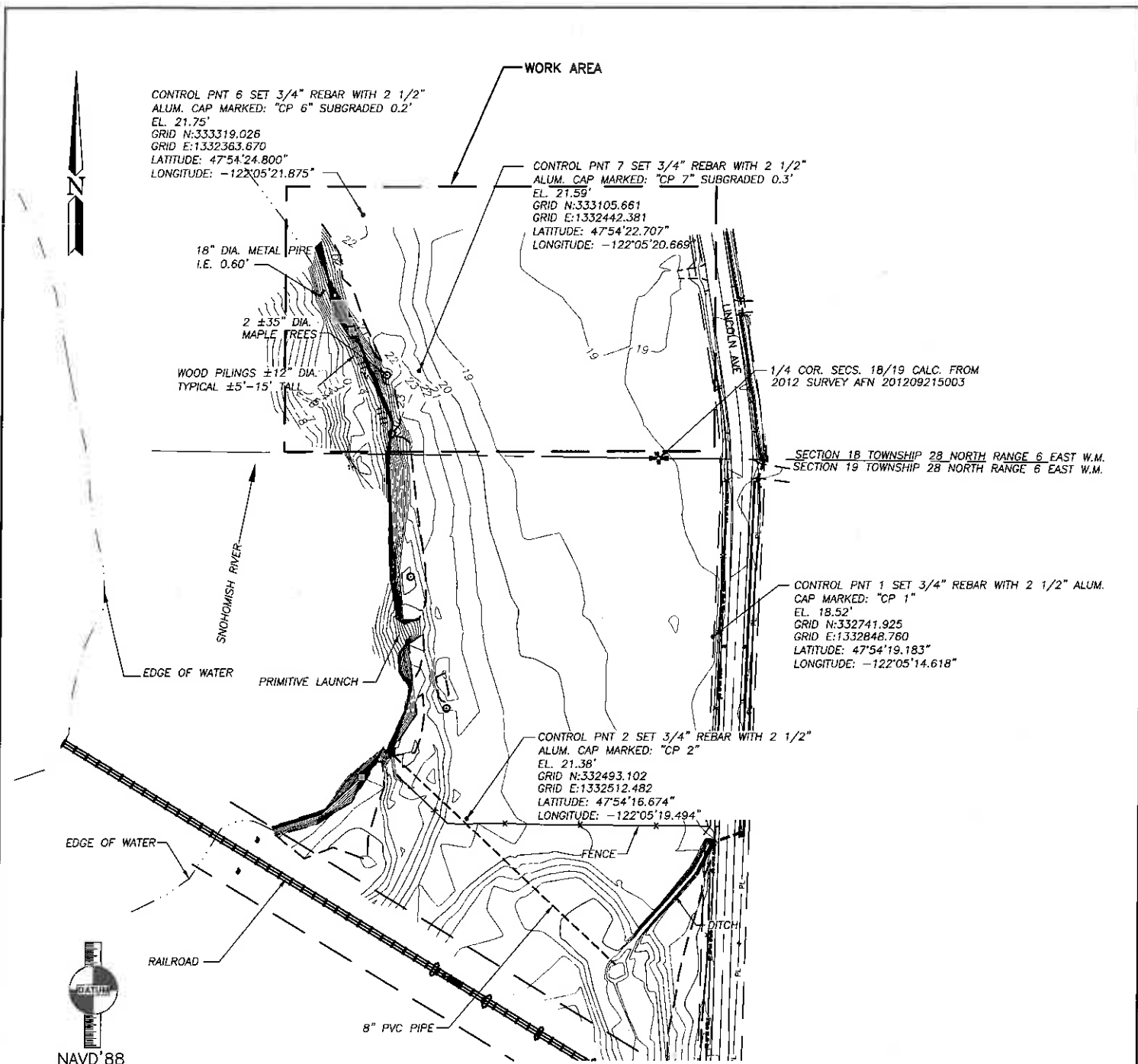
IN: SNOHOMISH RIVER

NEAR/AT: SNOHOMISH

COUNTY: SNOHOMISH

STATE: WA

2/17/2015 1:26:43 PM

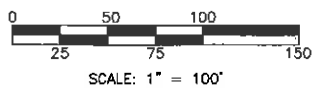
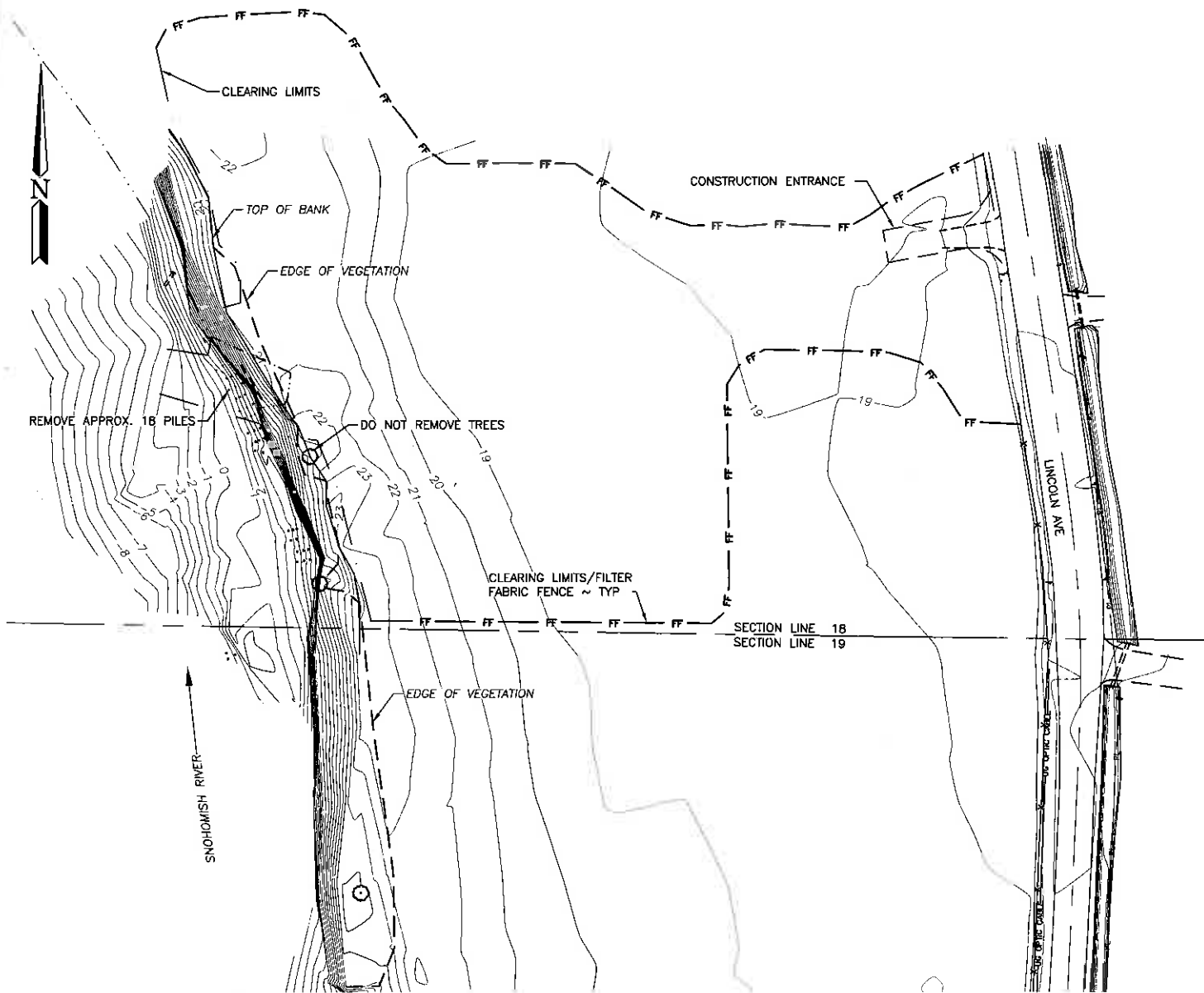


EXISTING SITE PLAN

SCALE: 1" = 200'

DATUM		GAUGE		NEW SITE
DATE	TIME	NAV88 DATUM	GAUGE DATUM	NAV88 DATUM
09/04/2014	09:24 AM		7.18'	0.997'
01/30/2013	12:40 PM	9.76'	16.10' (16.15 PER NOAA)	
		-6.34	0.00	-6.18
LOW WATER		-0.84'	5.5' PER NOAA 2012	-0.68' AT NEW SITE
CHW		8.50'	14.84'	8.66' AT NEW SITE
MAX. FLOOD		28.66'	35.0 PER NOAA	28.82 AT NEW SITE

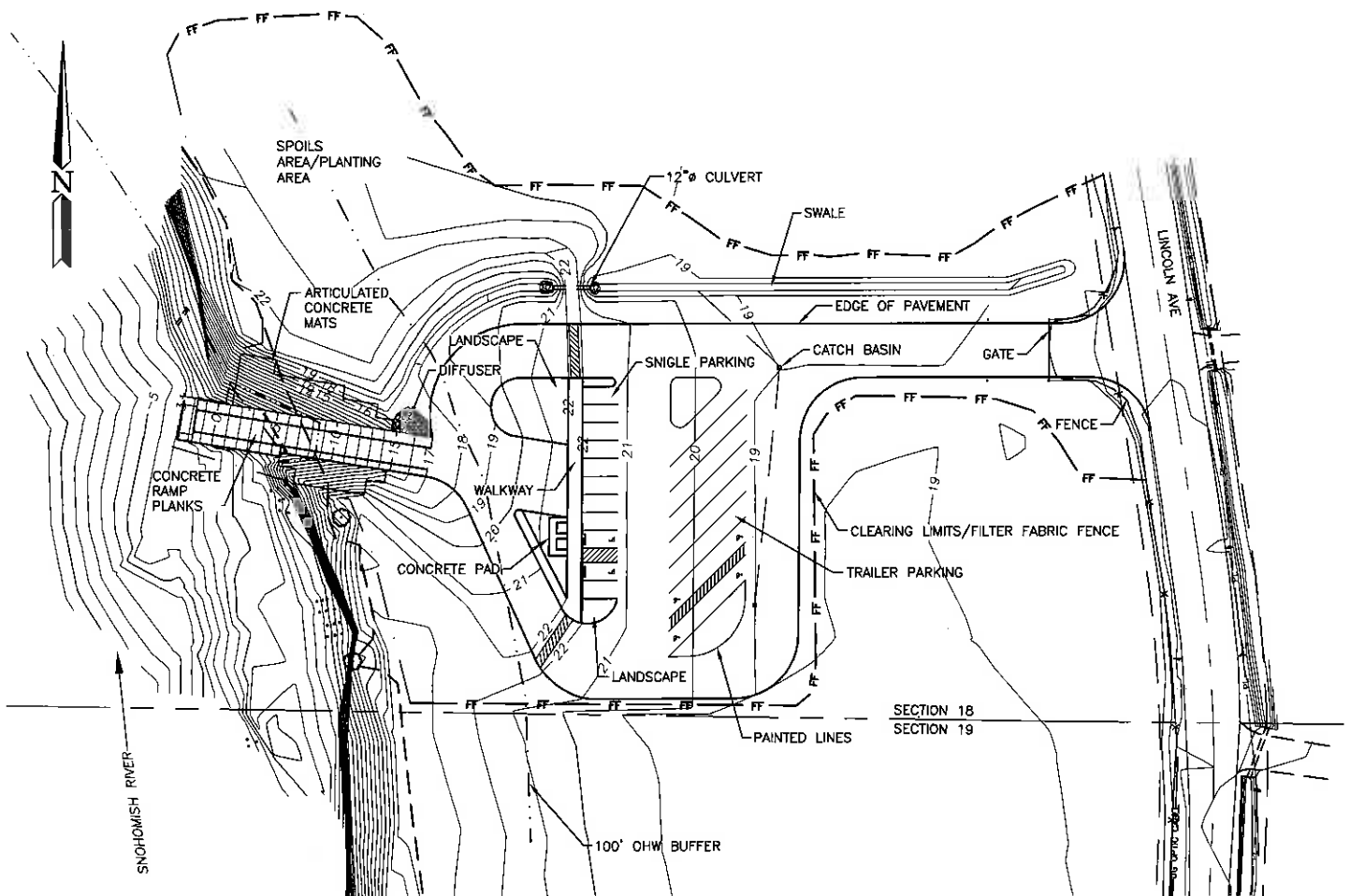
REFERENCE NUMBER:
 APPLICANT NAME:
 WASHINGTON DEPT. of FISH & WILDLIFE
 PROPOSED PROJECT:
 BOAT ACCESS RAMP
 LOCATION: SNOHOMISH
 SHEET 2 OF 15 DATE: 02/17/2015



EROSION CONTROL PLAN

SCALE: 1" = 100'

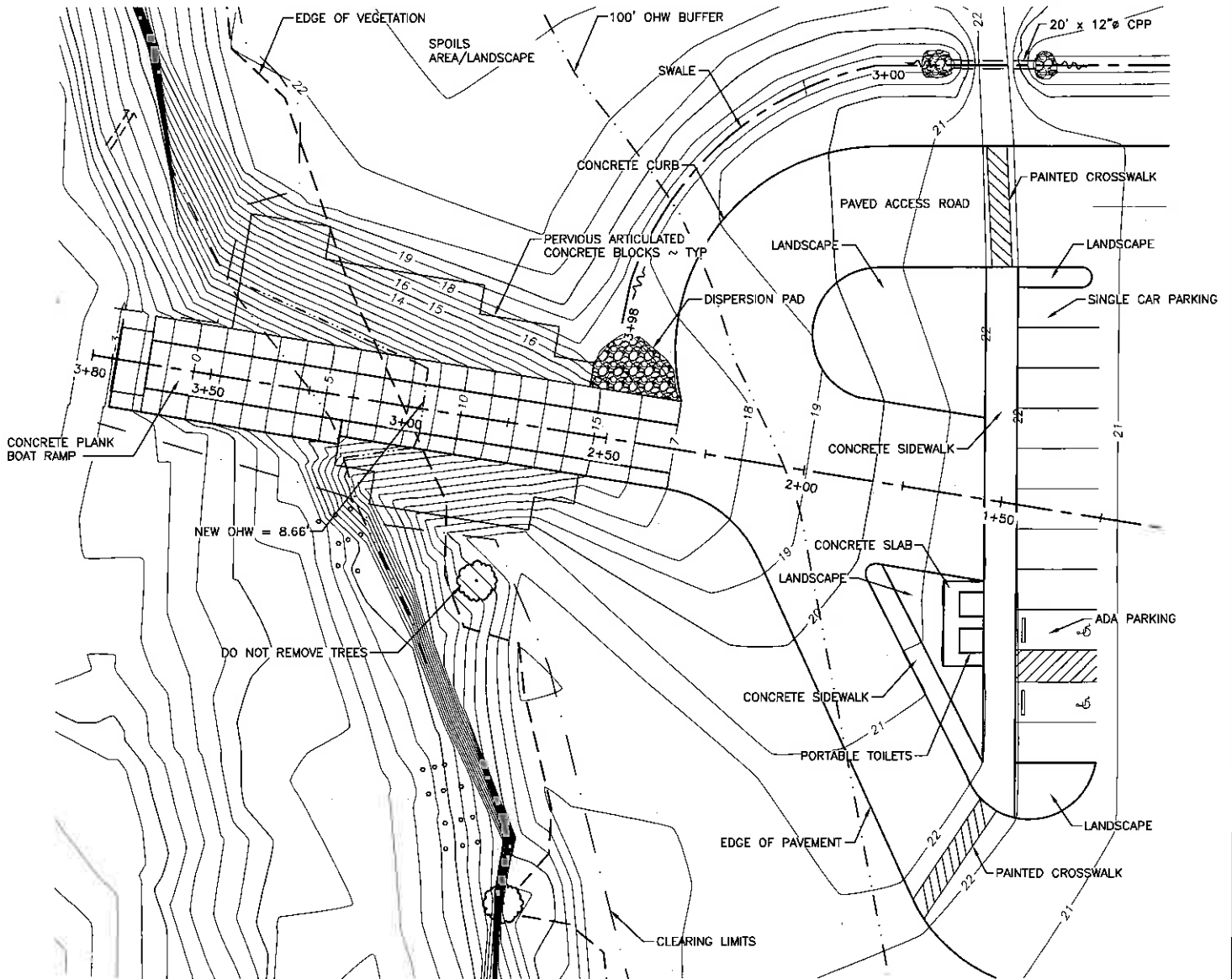
REFERENCE NUMBER:
 APPLICANT NAME:
WASHINGTON DEPT. of FISH & WILDLIFE
 PROPOSED PROJECT:
EROSION CONTROL PLAN
 LOCATION: CITY OF SNOHOMISH
 SHEET **3** OF 15 DATE: 02/17/2015



SITE PLAN
SCALE: 1" = 100'

SNOHOMISH VOLUMES					
RAMP	AREA	DEPTH	CY CUT	CY FILL	
RAMP X	756		1,510	9	ABOVE OHW
RAMP X	960		131	12	BELOW OHW
PLANKS	756	0.5		14	ABOVE OHW
PLANKS	960	0.5		18	BELOW OHW
EC MAT	2700	0.5		50	ABOVE OHW
EC MAT	1200	0.75		33	BELOW OHW
PARKING	AREA	DEPTH	CY CUT	CY FILL	
SOD	42000	0.5	579		
PARKING X			540		
SWALE			115		400 LFx4' WIDE
CONCRETE	1384	0.50		26	
ASPHALT	39241	0.25		363	
CSTC	39241	0.17		242	
CSBC	39241	0.33		484	
BALLAST ROCK	44000	var.		800	
TOTALS			2,875	2,052	
SPOILS			823	ONSITE	
SPOILS			2,052	OFFSITE	(NO NET GAIN)
TOTAL AREA OF DISTURBANCE (INCLUDING LANDSCAPE) = 2.6 ACRES					

REFERENCE NUMBER:
 APPLICANT NAME:
WASHINGTON DEPT. of FISH & WILDLIFE
 PROPOSED PROJECT:
BOAT ACCESS RAMP
 LOCATION: CITY OF SNOHOMISH
 SHEET 4 OF 15 DATE: 02/17/2015



RAMP AREA PLAN

SCALE: 1" = 40'

REFERENCE NUMBER:

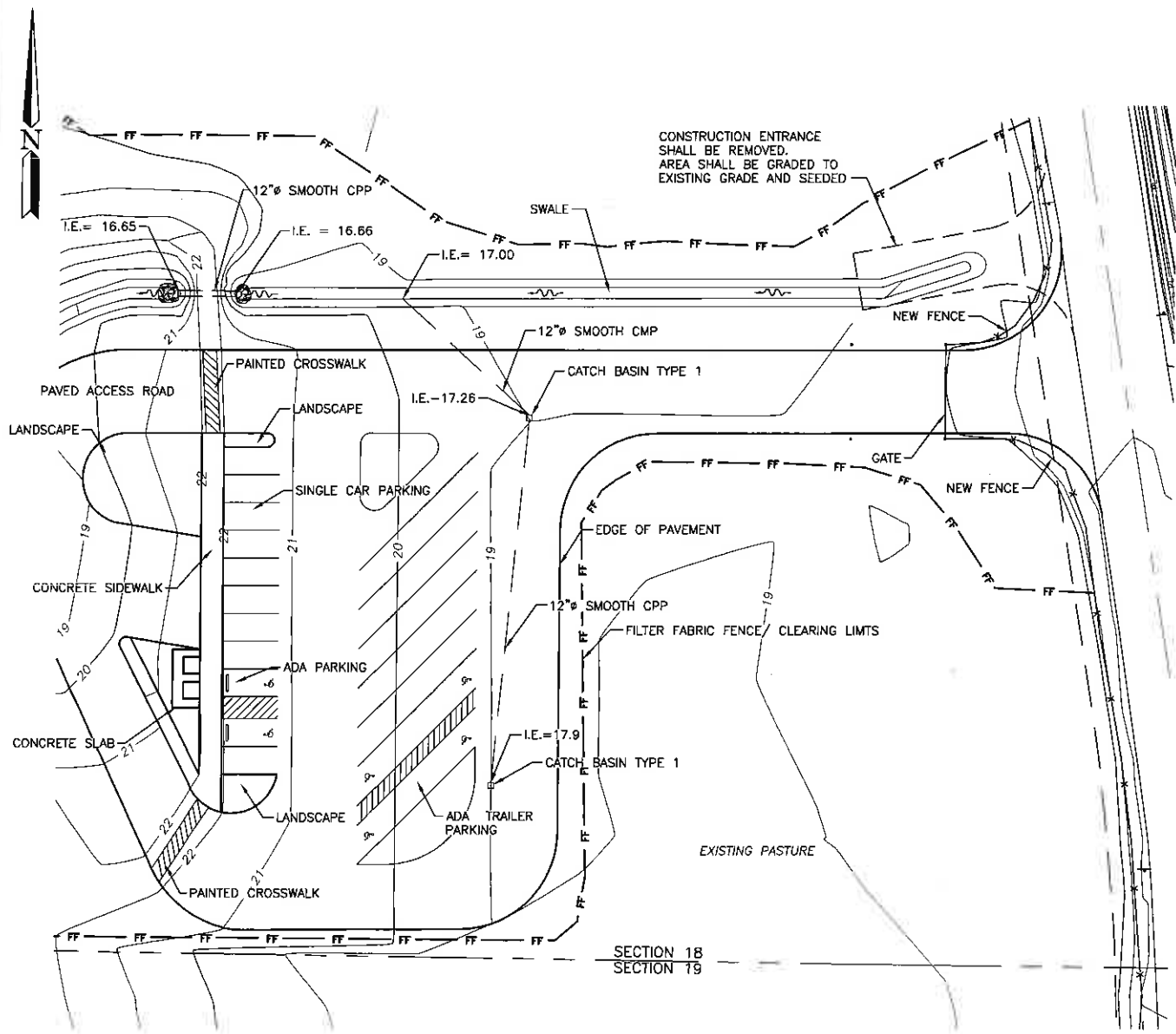
APPLICANT NAME:
WASHINGTON DEPT. of FISH & WILDLIFE

PROPOSED PROJECT:

BOAT ACCESS RAMP

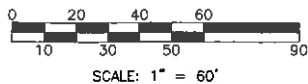
LOCATION: CITY OF SNOHOMISH

SHEET 5 OF 15 DATE: 02/17/2015



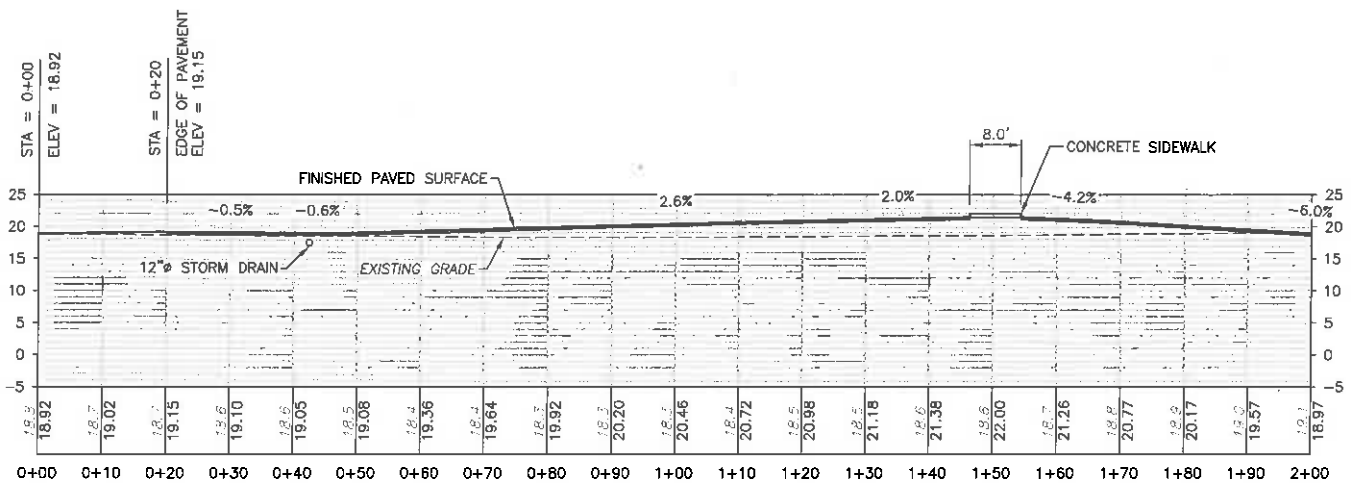
PARKING AREA PLAN

SCALE: 1" = 60'



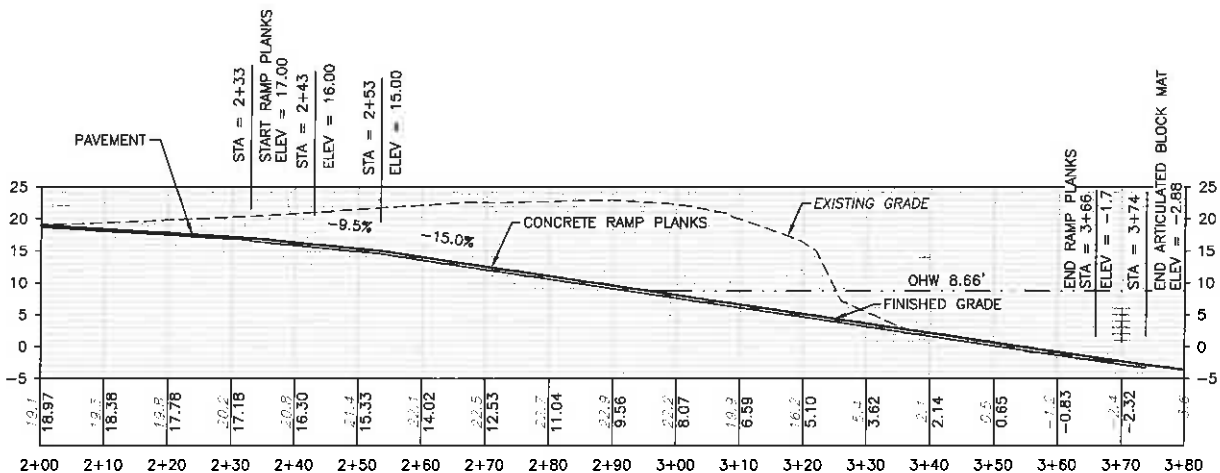
KODGPKPEG

REFERENCE NUMBER:
 APPLICANT NAME:
WASHINGTON DEPT. of FISH & WILDLIFE
 PROPOSED PROJECT:
PARKING AREA PLAN
 LOCATION: CITY OF SNOHOMISH
 SHEET 6 OF 15 DATE: 02/17/2015



PARKING AREA PROFILE

SCALE: 1" = 30'



BOAT RAMP PROFILE

SCALE: 1" = 30'

REFERENCE NUMBER:

APPLICANT NAME:

WASHINGTON DEPT. of FISH & WILDLIFE

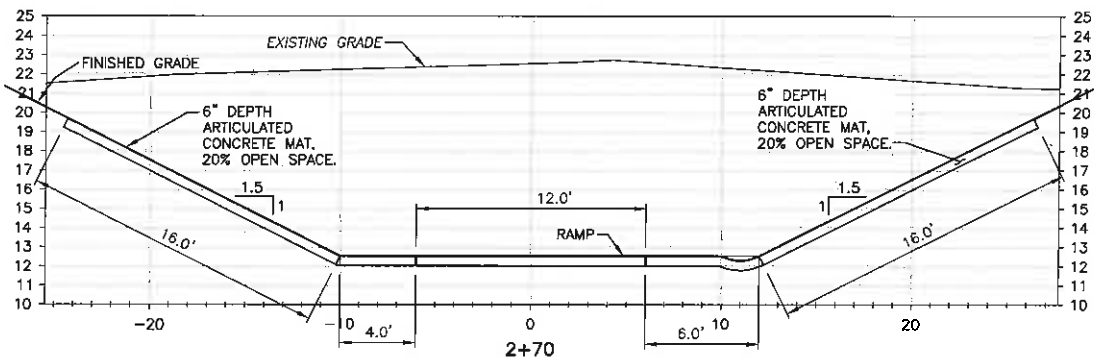
PROPOSED PROJECT:

BOAT ACCESS RAMP

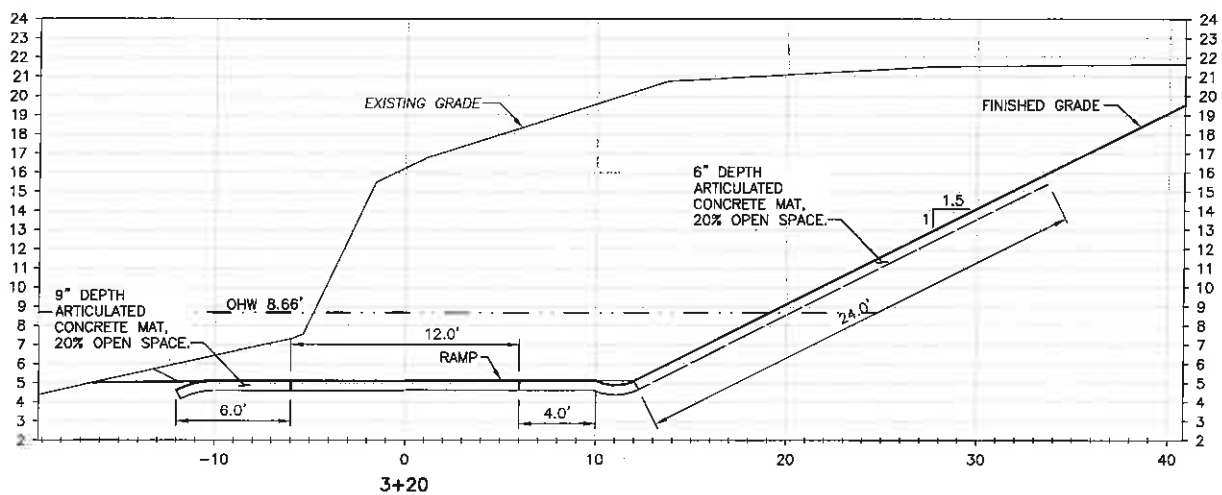
LOCATION: CITY OF SNOHOMISH

SHEET 7 OF 15

DATE: 02/17/2015

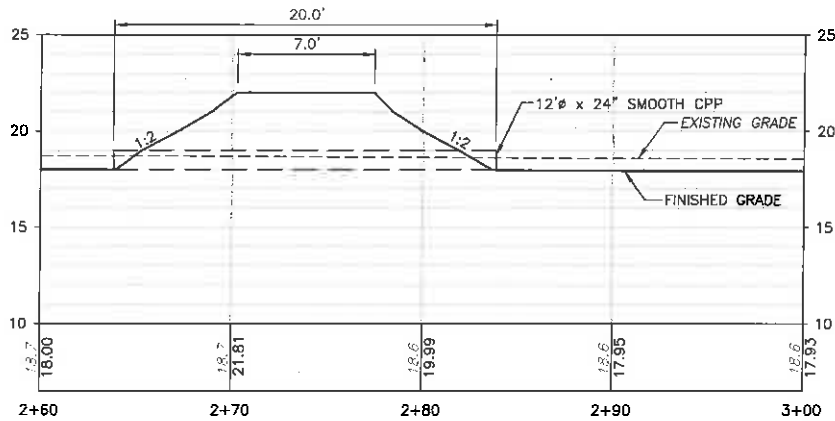


UPPER RAMP SECTION
SCALE: 1" = 10'



LOWER RAMP SECTION
SCALE: 1" = 10'

REFERENCE NUMBER:
APPLICANT NAME:
WASHINGTON DEPT. of FISH & WILDLIFE
PROPOSED PROJECT:
BOAT ACCESS RAMP
LOCATION: CITY OF SNOHOMISH
SHEET 8 OF 15 DATE: 02/17/2015

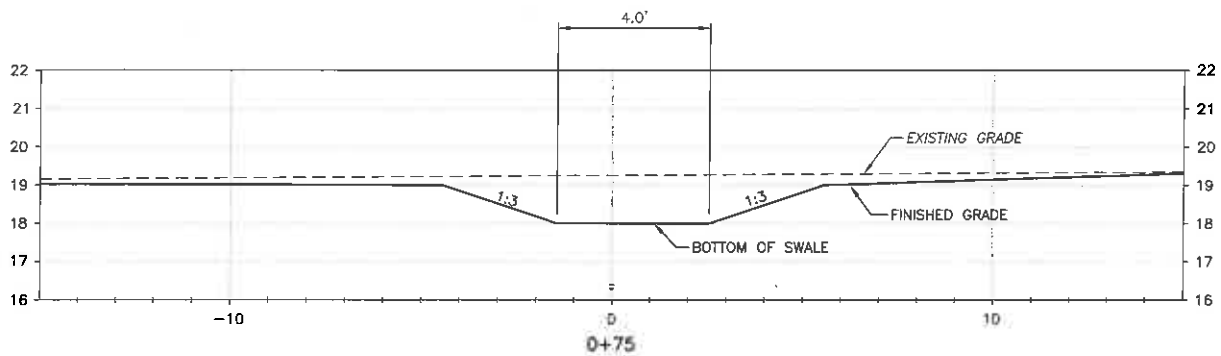


DRAINAGE SWALE PROFILE

SCALE: 1" = 10'

NOTE:

SWALE HAS A 0.5% DRAINAGE SLOPE AND IS APPROX. 400' LONG. SEED WITH D.O.E. MIX AND SEED DISTURBED AREAS.



DRAINAGE SWALE SECTION

SCALE: 1" = 10'

REFERENCE NUMBER:

APPLICANT NAME:

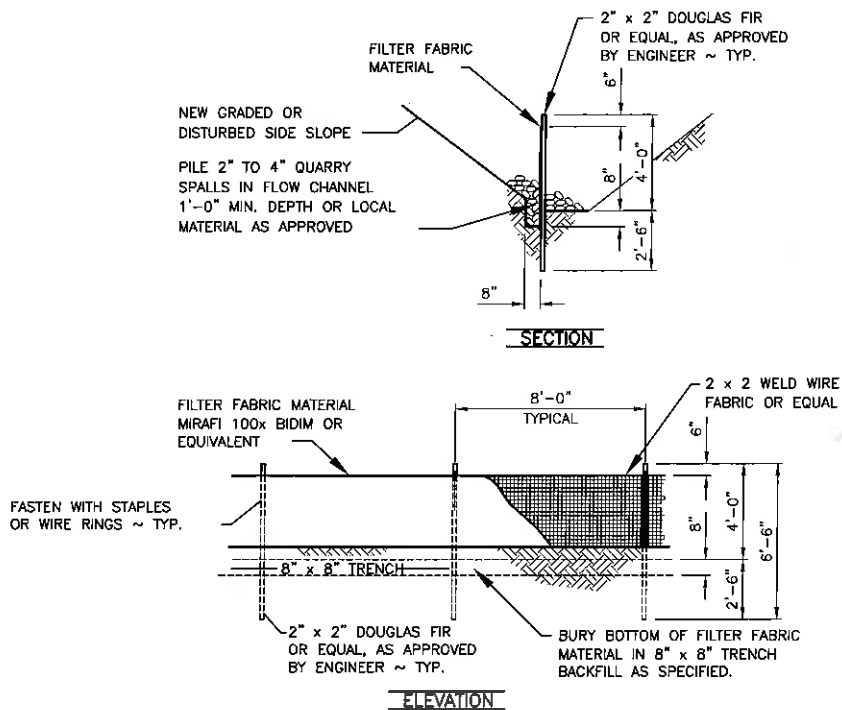
WASHINGTON DEPT. of FISH & WILDLIFE

PROPOSED PROJECT:

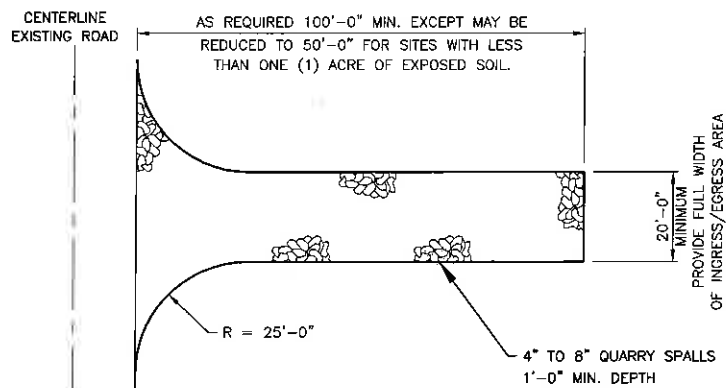
BOAT ACCESS RAMP

LOCATION: CITY OF SNOHOMISH

SHEET 9 OF 15 DATE: 02/17/2015



TYPICAL FILTER FABRIC FENCE



TYPICAL CONSTRUCTION ENTRANCE
NOT TO SCALE

REFERENCE NUMBER:
 APPLICANT NAME:
 WASHINGTON DEPT. of FISH & WILDLIFE
 PROPOSED PROJECT:
 BOAT ACCESS RAMP
 LOCATION: CITY OF SNOHOMISH
 SHEET 10 OF 15 DATE: 02/17/2015

EROSION CONTROL NOTES:

A FILTER FABRIC:

1. FILTER FABRIC SHALL BE A CONTINUOUS ROLL CUT TO LENGTH OF BARRIER AS NEEDED. IF JOINTS ARE NECESSARY FABRIC SHALL BE SPLICED TOGETHER ONLY AT SUPPORT POSTS WITH A MINIMUM OF SIX (6) INCH OVERLAP. BOTH ENDS SHALL BE SECURED AS REQUIRED.
2. FILTER FABRIC SHALL BE INSTALLED TO FOLLOW CONTOURS. FENCE POSTS SHALL BE SPACED A MAXIMUM OF EIGHT (8) FEET APART UNLESS OTHERWISE SHOWN HEREIN. ALL POSTS SHALL BE DRIVEN INTO THE GROUND A MINIMUM OF 30 INCHES.
3. A TRENCH SHALL BE EXCAVATED, ROUGHLY EIGHT (8) INCHES WIDE BY EIGHT (8) INCHES DEEP UPSLOPE AND ADJACENT TO THE POST TO ALLOW THE FILTER FABRIC TO BE BURIED.
4. WHEN STANDARD STRENGTH FILTER FABRIC IS UTILIZED, A WIRE SINGLE SPACE MESH SUPPORT FENCE SHALL BE FASTENED TO THE UPSLOPE (OR UPSTREAM) SIDE OF THE POSTS USING ONE (1) INCH MINIMUM LENGTH WIRE STAPLES, TIE WIRE OR APPROVED HOG RINGS. ALL WIRE SUPPORT SHALL EXTEND INTO THE TRENCH A MINIMUM OF FOUR (4) INCHES AND SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE ORIGINAL GRADE.
5. ALL FILTER FABRIC SHALL BE STAPLED OR WIRED TO SUPPORT FENCING AND A MINIMUM OF 20 INCHES OF FABRIC SHALL BE EXTENDED INTO THE TRENCH. FILTER FABRIC SHALL NOT BE STAPLED OR FASTENED TO EXISTING TREES OF STRUCTURES UNLESS OTHERWISE APPROVED BY THE ENGINEER.
6. IF HIGH STRENGTH FILTER FABRIC AND CLOSER SPACING ARE USED, THE WIRE SUPPORT FENCING MAY BE ELIMINATED. HIGH STRENGTH FABRIC SHALL BE STAPLED OR WIRED DIRECTLY TO POSTS AS REQUIRED BY THE ENGINEER.
7. CUTOFF TRENCH SHALL BE BACKFILLED WITH 3/4 INCH MINIMUM DIAMETER WASHED GRAVEL OR OTHER SIMILAR SOURCE AS APPROVED BY THE ENGINEER.
8. FILTER FENCING SHALL BE INSTALLED WHERE SHOWN ON THE PLAN OR AS DIRECTED BY THE ENGINEER PRIOR TO COMMENCEMENT OF WORK. ALL FENCING SHALL BE INSPECTED DAILY DURING CONSTRUCTION AND AFTER EACH SIGNIFICANT RAINFALL EVENT UNTIL SITE HAS BEEN PERMANENTLY STABILIZED. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
9. REMOVAL OF TRAPPED SEDIMENT SHALL BE PERFORMED WHEN AMOUNTS REACH APPROXIMATELY 1/3 HEIGHT OF THE FENCE. MATERIAL REMOVED FROM FENCE SHALL BE DISPOSED OF AT AN APPROVED OFFSITE LOCATION UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
10. FILTER FENCING SHALL REMAIN IN-PLACE UNTIL SITE HAS BEEN REVEGETATED TO ORIGINAL CONDITION OR DIRECTED BY THE ENGINEER. CONTRACTOR SHALL BE RESPONSIBLE FOR FENCING REMOVAL FROM THE SITE WITHIN 30 DAYS OF SITE STABILIZATION.

B CONSTRUCTION ENTRANCES:

11. QUARRY SPALLS SHALL BE IN-PLACE AND FUNCTIONAL BEFORE SITE PREPARATION ACTIVITIES COMMENCE. ANY DEBRIS TRACKING ONTO ADJACENT ROADWAYS SHALL BE CLEARED DAILY OR AS DIRECTED BY THE PROJECT ENGINEER. AT NO TIME SHALL ONLY WATER BE PLACED ON TRACKED ROADWAY, ROADWAY SHALL BE SWEEPED AND/OR SCRAPED CLEAN BEFORE WATER IS UTILIZED.
12. ENTRANCE ROCK SHALL NOT BE REMOVED UNTIL SUCH TIME AS ALL ROADWAY STABILIZATION IS COMPLETE. QUARRY SPALLS REMOVED MAY BE UTILIZED IN OTHER SITE AREAS AS NEEDED. CONSULT ENGINEER FOR SPECIFIC APPROVALS.

REFERENCE NUMBER:

APPLICANT NAME:

WASHINGTON DEPT. of FISH & WILDLIFE

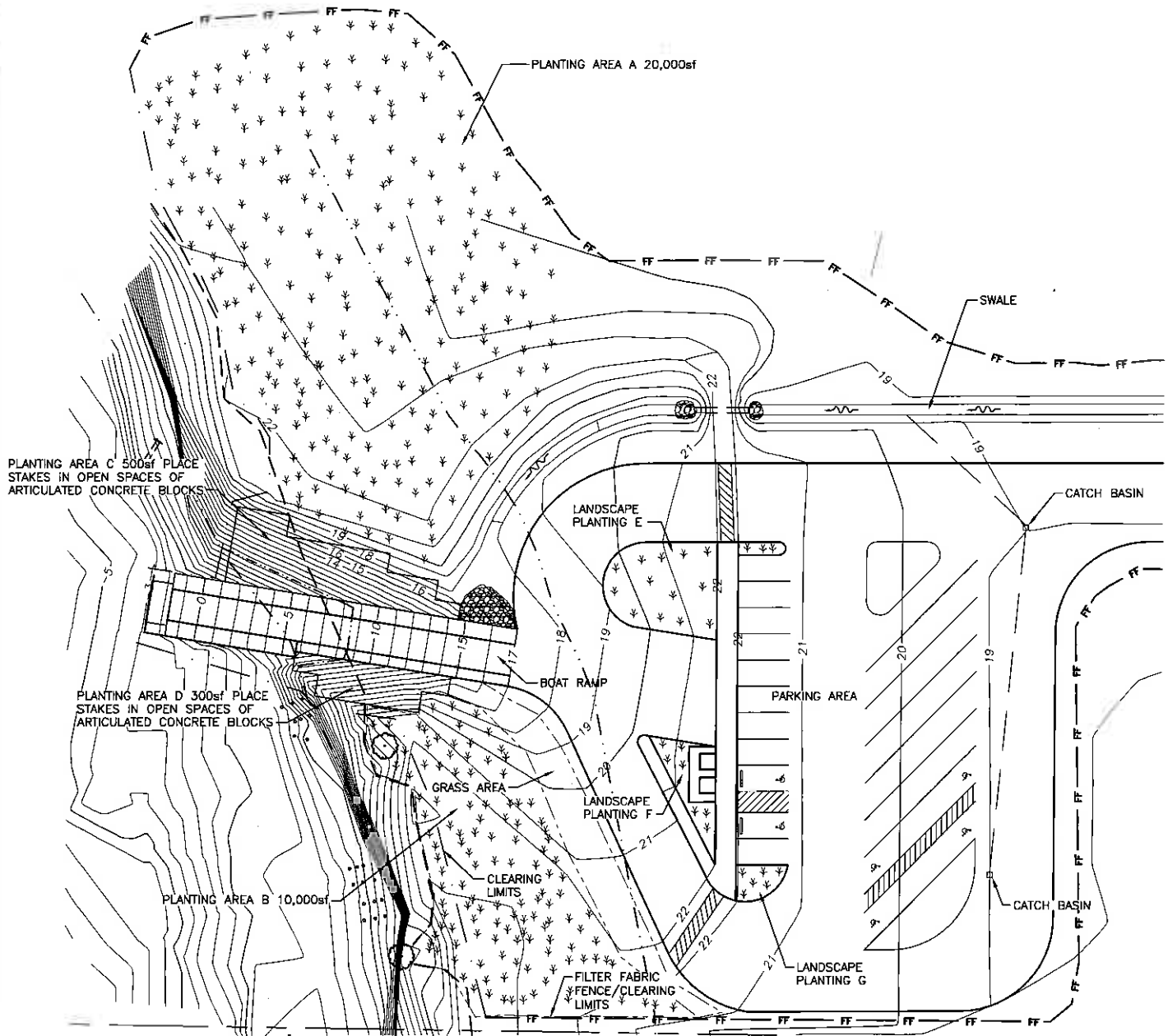
PROPOSED PROJECT:

BOAT ACCESS RAMP

LOCATION: CITY OF SNOHOMISH

SHEET 11 OF 15

DATE: 02/17/2015



RAMP AREA PLANTING PLAN

SCALE: 1" = 60'

NOTE:

FOR PLANTING SCHEDULE SEE SHEET 13.

REFERENCE NUMBER:

APPLICANT NAME:
WASHINGTON DEPT. of FISH & WILDLIFE

PROPOSED PROJECT:

BOAT ACCESS RAMP

LOCATION: CITY OF SNOHOMISH

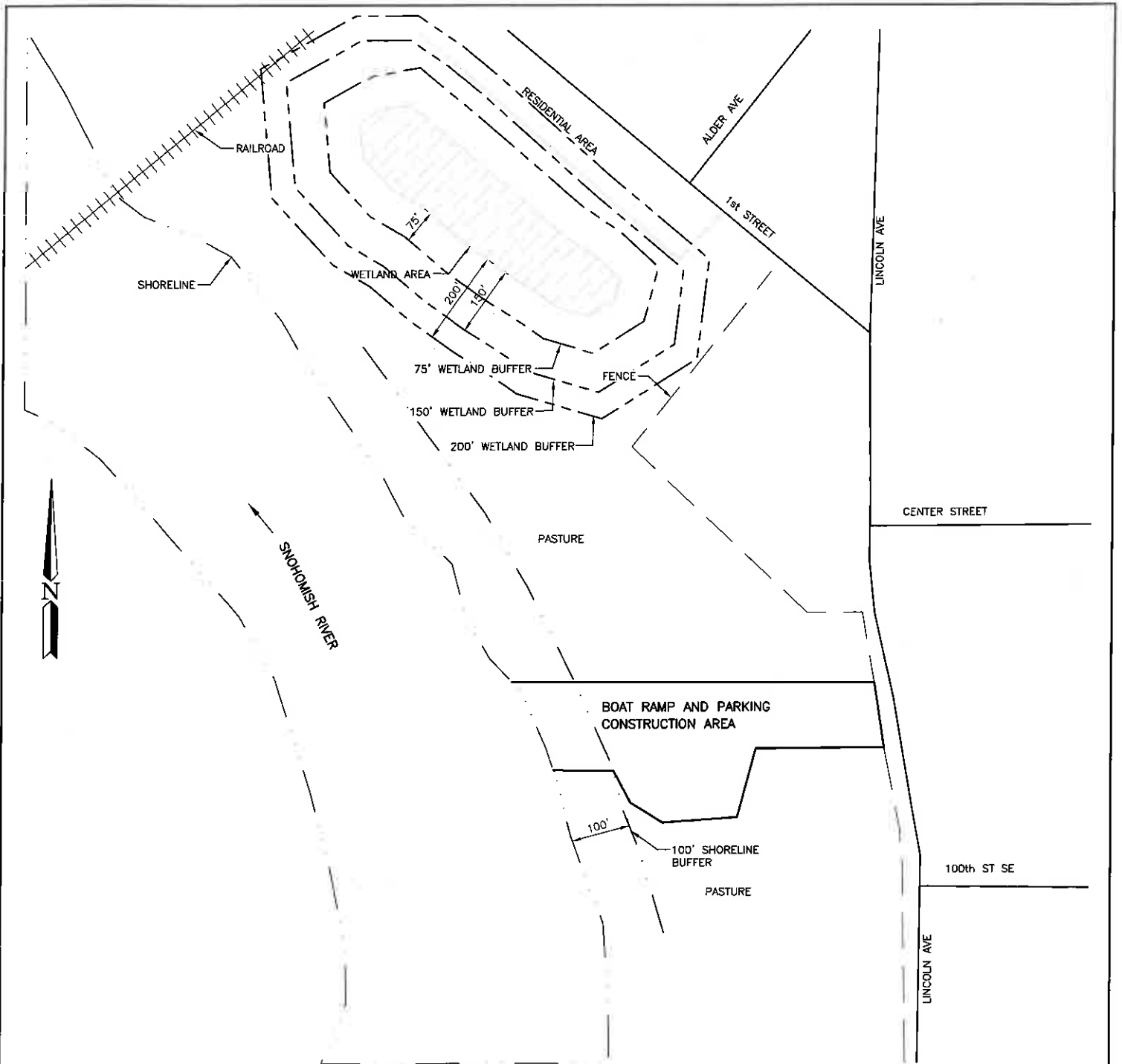
SHEET 12 OF 15

DATE: 02/17/2015

PLANTING PLAN						
AREA	SF	PLANTS	%	NAME	SIZE	SPACING
A	20000	1,250	25	NOOTKA ROSE	1 GAL	4' O.C.
			25	PACIFIC NINE BARK	1 GAL	4' O.C.
			25	RED OSER DOGWOOD	1 GAL	4' O.C.
			25	SALMON BERRY	1 GAL	4' O.C.
		44		BIG LEAF MAPLE	2 GAL	
B	10,000	625	25	NOOTKA ROSE	1 GAL	4' O.C.
			25	PACIFIC NINE BARK	1 GAL	4' O.C.
			25	RED OSER DOGWOOD	1 GAL	4' O.C.
			25	SALMON BERRY	1 GAL	4' O.C.
		22		BIG LEAF MAPLE	2 GAL	
C	1700	425	50	SITKA WILLOW	STAKE	2' O.C.
			50	PACIFIC WILLOW	STAKE	2' O.C.
D	400	100	50	SITKA WILLOW	STAKE	2' O.C.
			50	PACIFIC WILLOW	STAKE	2' O.C.
E	600	67	40	OREGON GRAPE	1 GAL	3' O.C.
			40	SWORD FIRN	1 GAL	3' O.C.
			20	RED OSER DOGWOOD	1 GAL	3' O.C.
F	300	33	40	OREGON GRAPE	1 GAL	3' O.C.
			40	SWORD FIRN	1 GAL	3' O.C.
			20	RED OSER DOGWOOD	1 GAL	3' O.C.
G	300	33	40	OREGON GRAPE	1 GAL	3' O.C.
			40	SWORD FIRN	1 GAL	3' O.C.
			20	KINIKINIK	1 GAL	3' O.C.
TOTAL	33300	2,600				
PLANT SPECIES IN CLUSTERS						
MULCH ALL PLANT AREAS WITH 3" MIN. BARK						
HYDROSEED BIOSWALE AND ALL DISTURBED AREAS ALONG SHOULDERS.						

SEED MIX	
FOR DISTURBED AREA	
PLANT	% BY WT.
BLUE WILDRYE	15
TUFTED HAIRGRASS	15
SAWBEAK SEDGE	15
SLOUGH GRASS	15
RED FESCUE	10
SOFT RUSH	15
MEADOW BARLEY	15

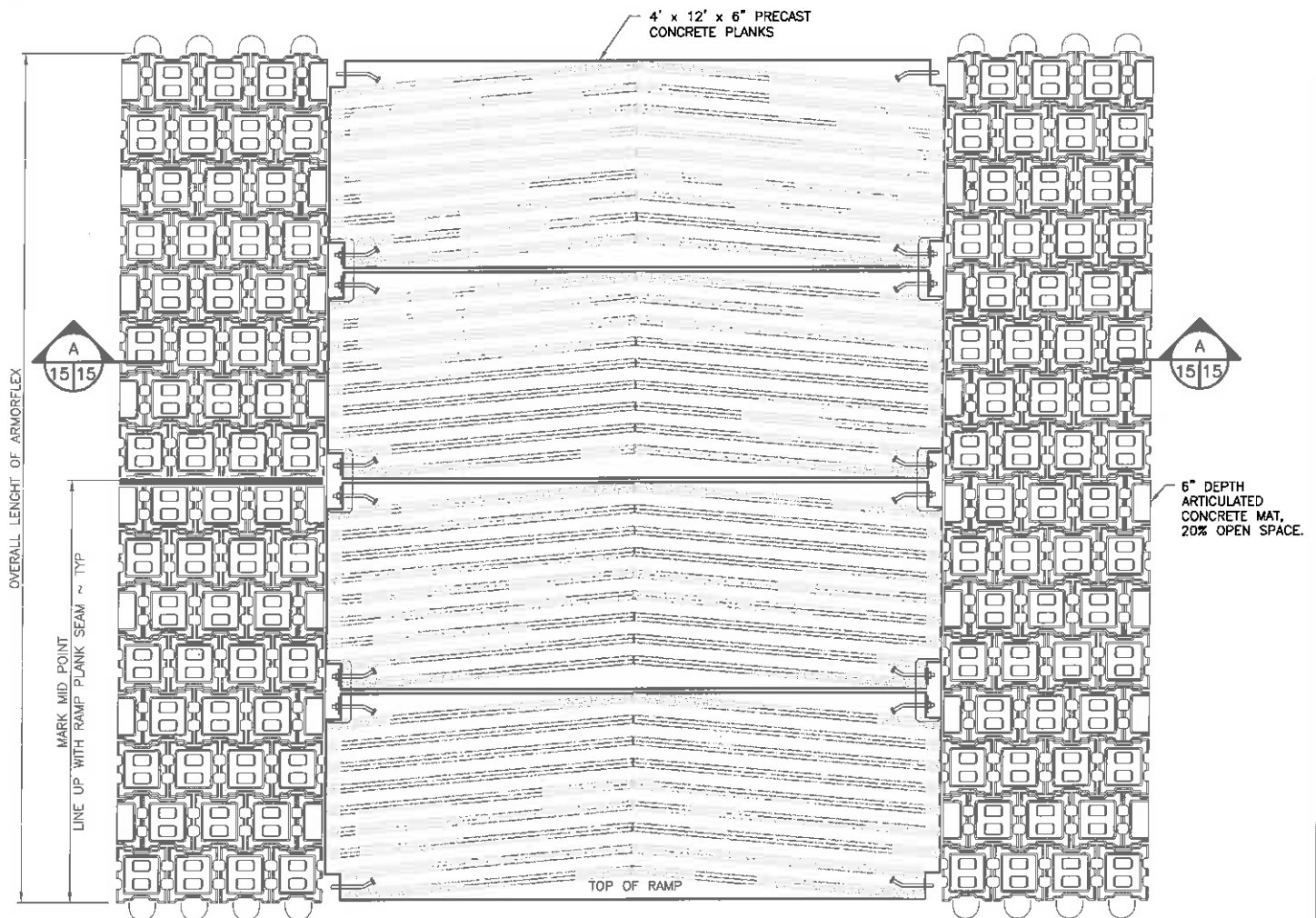
SITE PLANTING LIST



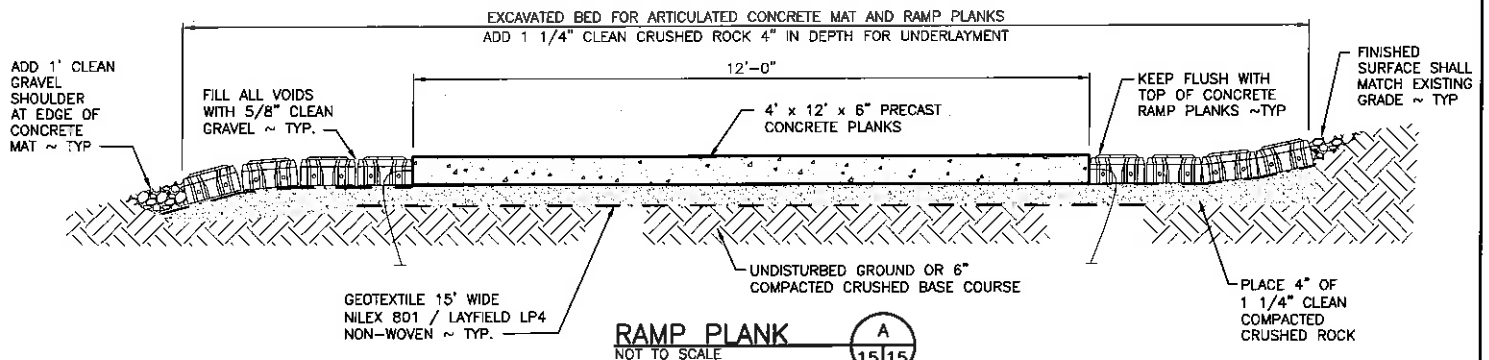
WETLAND AREA
NOT TO SCALE

NOTE:
WETLAND LOCATION FROM US FISH AND WILDLIFE SERVICES

REFERENCE NUMBER:
APPLICANT NAME:
WASHINGTON DEPT. of FISH & WILDLIFE
PROPOSED PROJECT:
BOAT ACCESS RAMP
LOCATION: CITY OF SNOHOMISH
SHEET 14 OF 15 DATE: 02/17/2015



TYPICAL RAMP PLANK PLAN
NOT TO SCALE



NOTE:
SEE SITE PLAN FOR SIZE AND LAYOUT OF ARTICULATED CONCRETE MATS

REFERENCE NUMBER:
APPLICANT NAME:
WASHINGTON DEPT. of FISH & WILDLIFE
PROPOSED PROJECT:
BOAT ACCESS RAMP
LOCATION: CITY OF SNOHOMISH
SHEET 15 OF 15 DATE: 02/17/2015